



NCHWA's Nursing Workforce Research Activities and Findings

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The HRSA National Center for Health Workforce Analysis

Mission

- To support more informed public and private sector decision making related to the health workforce through expanded and improved health workforce data, projections and information.
- To promote the supply and distribution of well-prepared health workers to ensure access to high quality, efficient care for the nation.

Goals of the Presentation

- Review the National Center's approach to nursing workforce analysis
- Present key findings on nursing workforce trends
- Discuss key sources of data on the nursing workforce

NCHWA Approach to Nurse Workforce Analysis

- A. Build on Existing Data Sources
- B. Promote a Nursing Minimum Dataset
- C. Collect Original Data Where Needed
- D. Nursing Workforce Projections
- E. Collaboration

A. Build on Existing Data Sources

- Assess, analyze, and compile existing data for reports
- Work with other organizations to improve nursing data collection:
 - National Ambulatory Medical Care Survey enhancements
 - Participation on the Standard Occupational Classification (SOC) policy committee

B. Promote a Nursing Minimum Dataset (MDS)

- In 2010, HRSA began establishing a MDS across more than a dozen professions (including nursing)
- Building on existing MDS efforts in nursing begun by the National Council of State Boards of Nursing and the National Forum of State Nursing Workforce Centers
- Goal is to cost-effectively integrate workforce data collection into nurse license renewal at the state level
- **This is the only strategy that will yield local-area data on an ongoing basis for workforce analysis and planning.**

C. Collect Original Data Where Needed

- When key data elements are missing for a critical health occupation, undertake original data collection
- 2012 National Sample Survey of Nurse Practitioners
 - Growing importance of NPs for primary and other care
 - Lack of reliable estimates of workforce size, specialty, and employment characteristics
 - Data collected from about 13,000 NPs (60% response rate)
 - Survey will support policy analysis and workforce projections

D. Nursing Workforce Projections

- 2012: Conducted background research and outreach to inform modeling
 - Research on economic drivers of nurse workforce participation and migration
 - Outreach to stakeholders in education, practice, and policy
- 2013: Developing new nurse workforce forecasting models using microsimulation modeling of both nurse supply and demand
 - Tool will facilitate detailed forecasting at the state level
- Upcoming clinical projections by medical specialty will integrate Nurse Practitioners and Physician Assistants.

E. Collaboration

- Interagency Consortium on Nursing Statistics (ICONS) member
- Dissemination of analysis and projections
 - Webinars
 - Reports
 - Modeling tools
- Supporting organizations involved in minimum dataset implementation
- Working with states to develop analysis capacity

The U.S. Nursing Workforce: Trends in Supply and Education

The Report's Objective

- Provide timely information, easily updatable, on key nursing workforce metrics for policymakers, workforce planners, and researchers
- Explore existing federal and non-federal data sources for nurse workforce analysis
- Include both RNs and LPNs
- Available at:
<http://bhpr.hrsa.gov/healthworkforce/reports/nursingworkforce/index.html>

Supply Data Sources

- Census Bureau's American Community Survey (ACS) 2008-2010 Public Use Microdata Sample
 - Approximately 3% sample of US residents yields a large sample of RNs and LPNs
 - Robust estimates at national and state level
 - New file available annually
- Census 2000 Long Form, 5% Public Use Sample
 - Techniques available for comparing to the ACS

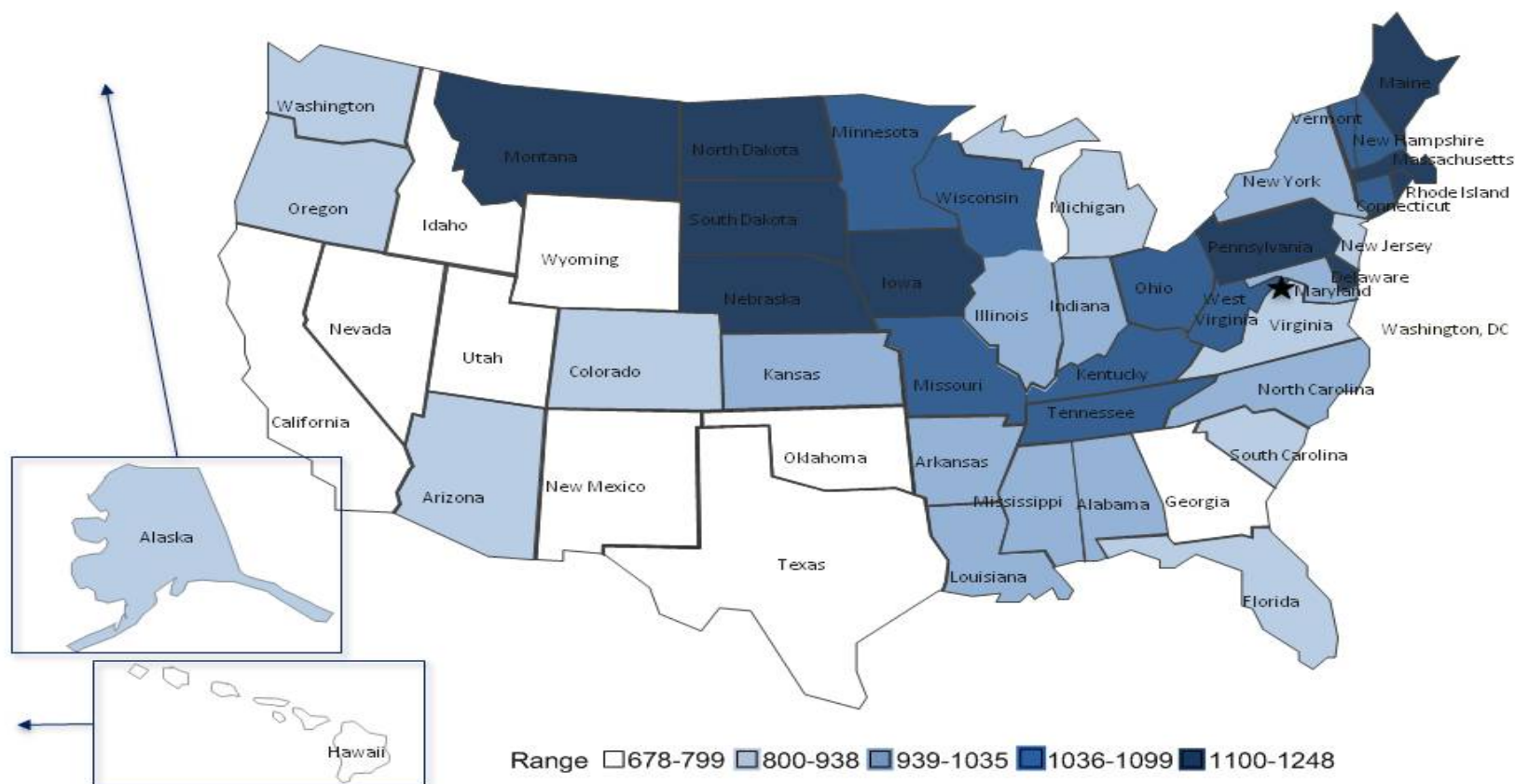
Nursing Workforce Size

	Estimated # of Nurses in the Nursing Workforce	Nurses per 100K residents
RNs	2,824,641	920.9
LPNs	690,038	225.0

Data Source: HRSA analysis of the ACS 2008-2010 three-year file

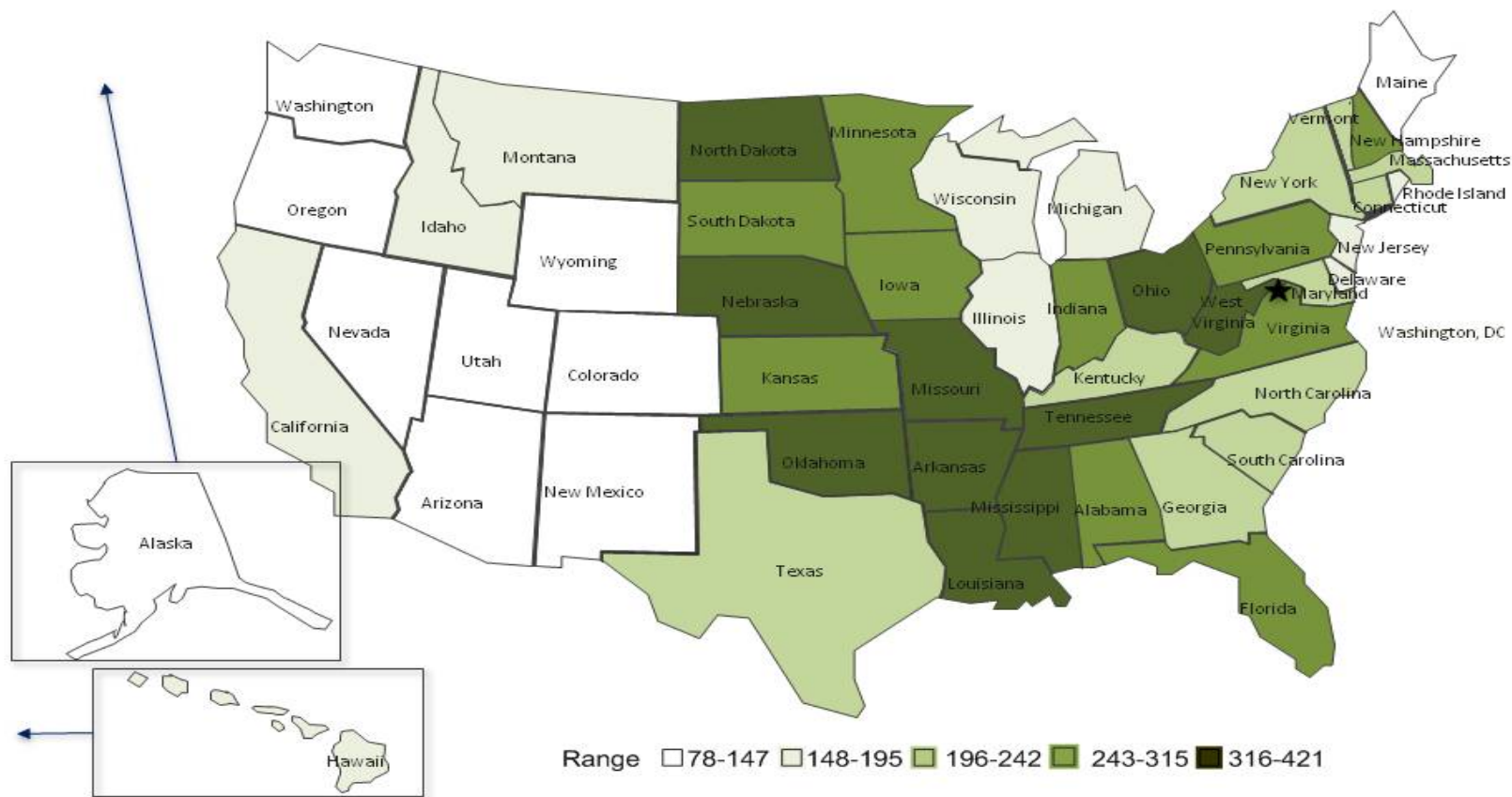
But, distribution across the country is uneven...

The RN Workforce per 100,000 Population, by State



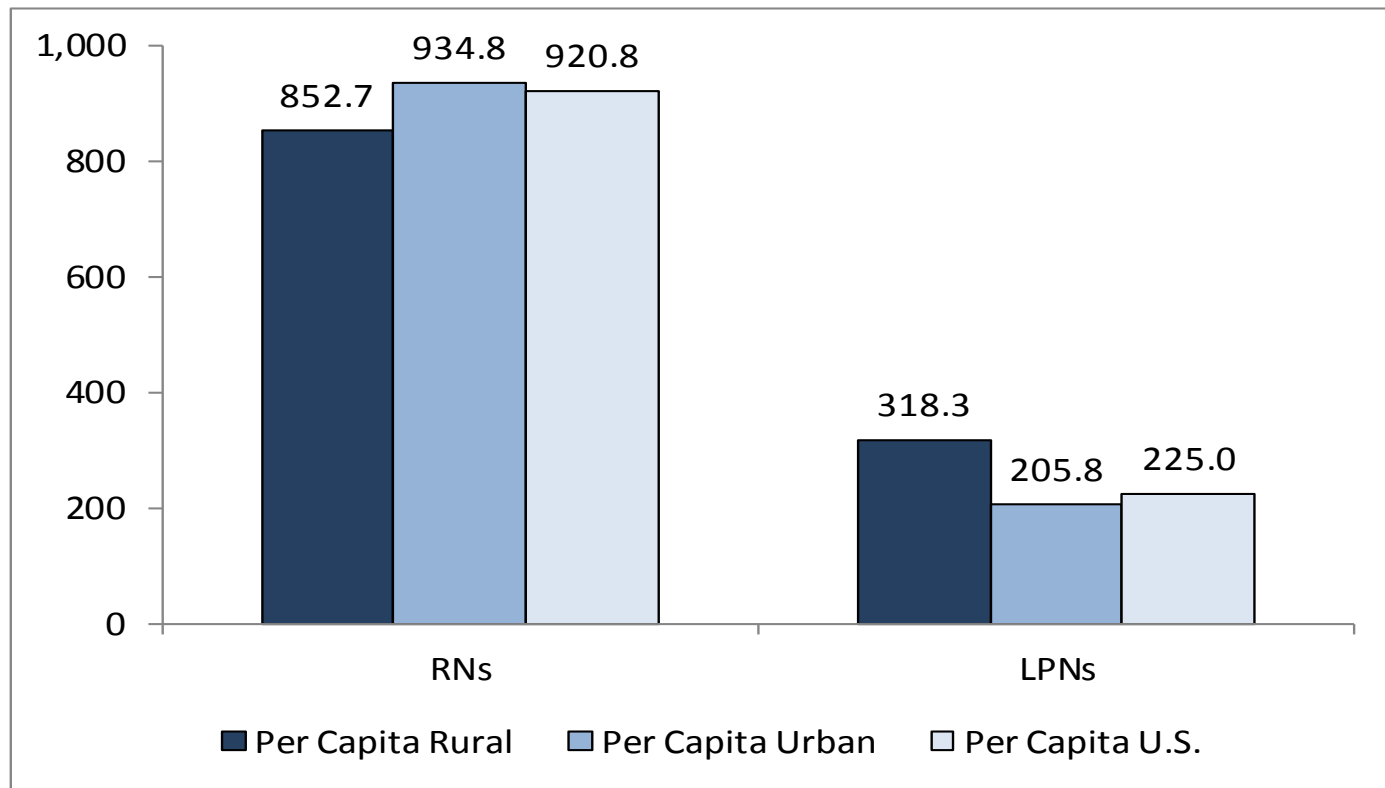
Data Source: HRSA analysis of the ACS 2008-2010 three-year file

The LPN Workforce per 100,000 Population, by State



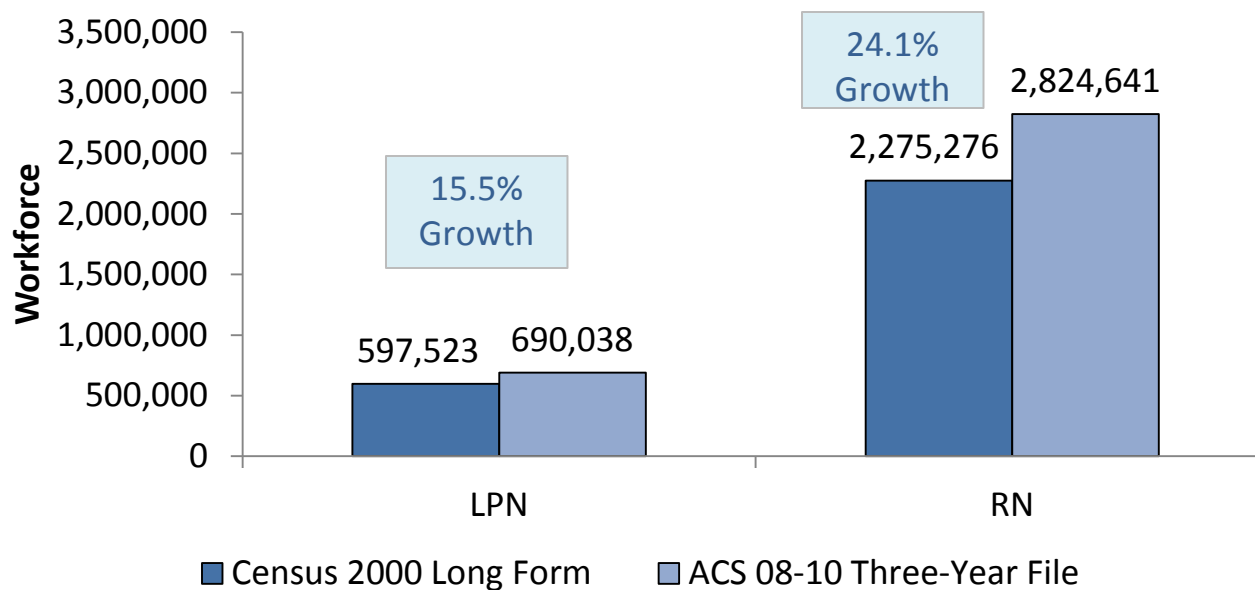
Data Source: HRSA analysis of the ACS 2008-2010 three-year file

Distribution Across Rural and Urban Areas



Data Source: HRSA analysis of the ACS 2008-2010 three-year file

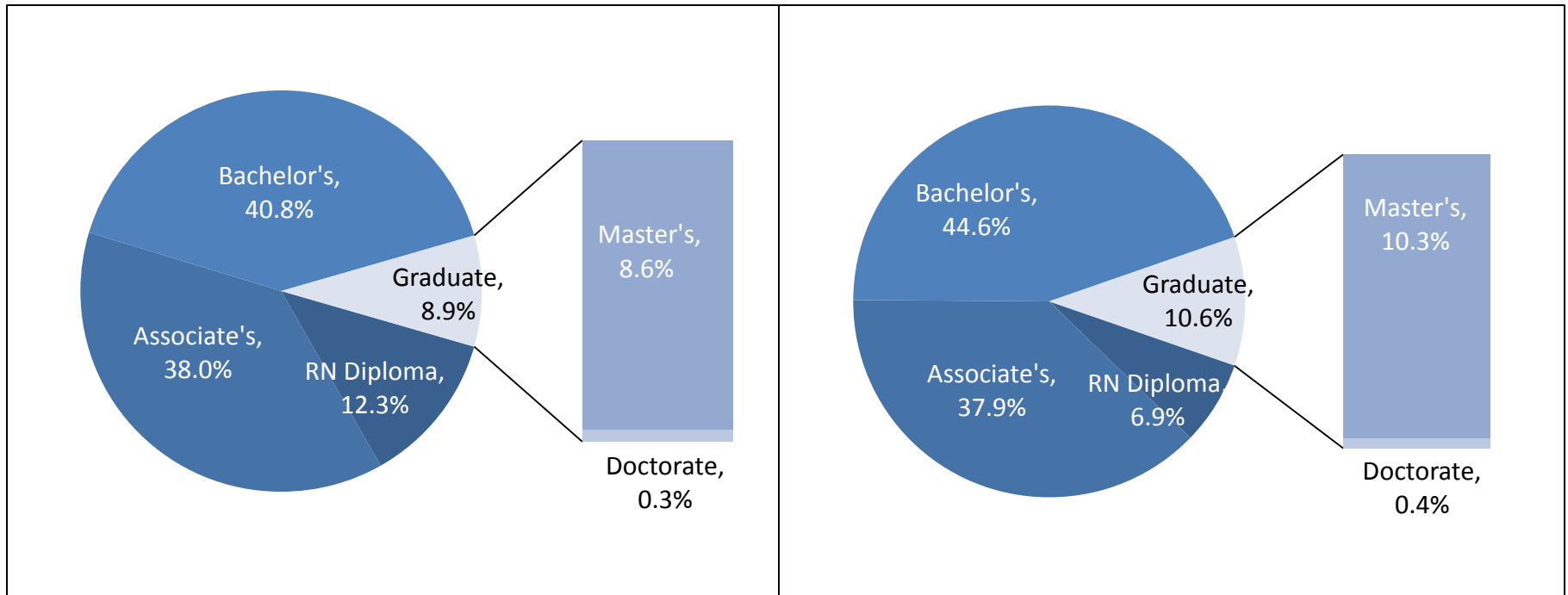
Nursing Workforce Trends: Growth



	Per Capita Supply 2000	Per Capita Supply 08-10	% Change in per Capita Supply
RNs	808.5	920.9	13.9%
LPNs	212.3	225.0	6.0%

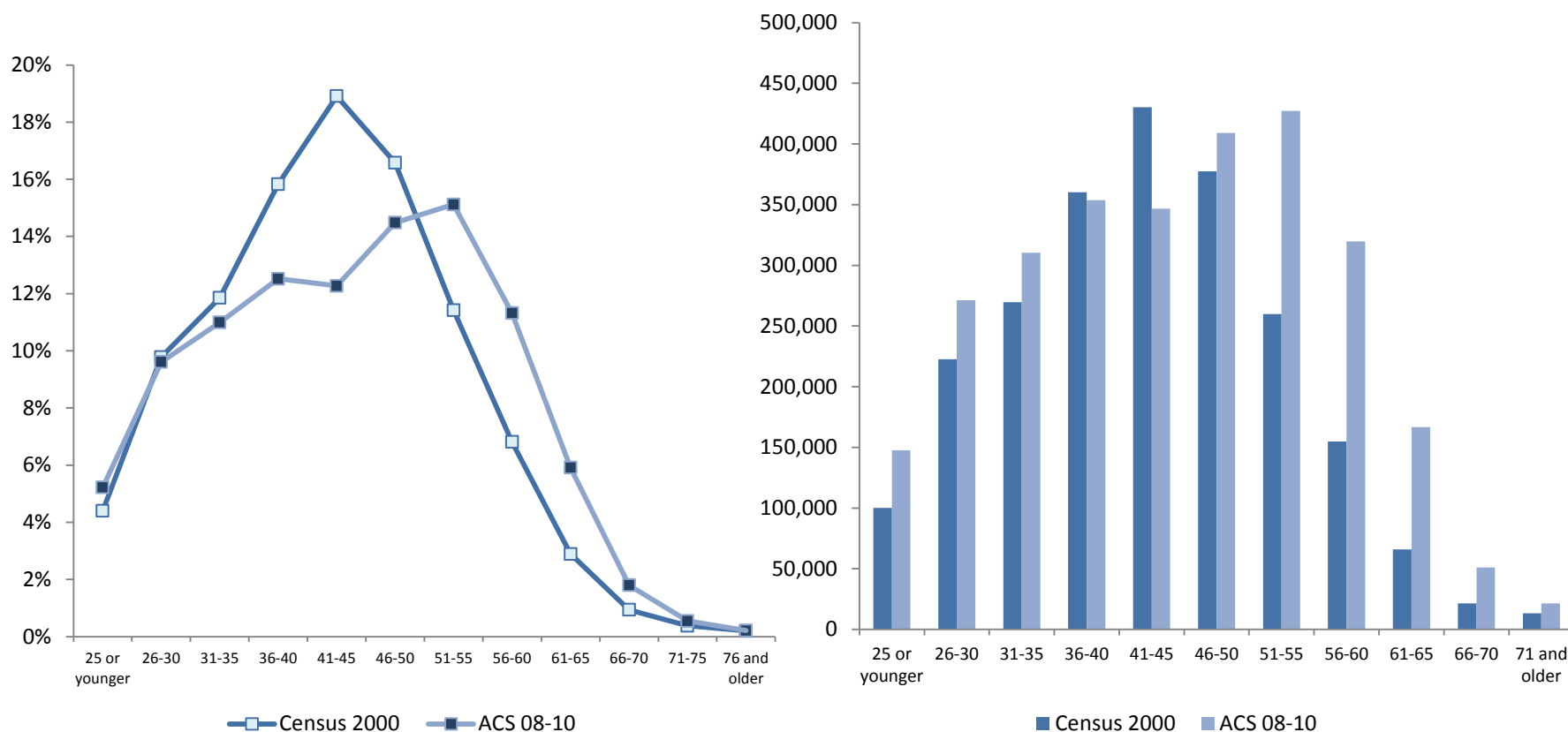
Data Sources: HRSA analysis of the ACS 2008-2010 three-year file and Census 2000 Long Form 5% sample

Nursing Workforce Trends: RN Educational Attainment



Data Sources: HRSA analysis of the ACS 2008-2010 three-year file and Census 2000 Long Form 5% sample

Nursing Workforce Trends: RN Age Distribution



Data Sources: HRSA analysis of the ACS 2008-2010 three-year file and Census 2000 Long Form 5% sample

Nursing Workforce Trends: RN Diversity

	Census 2000 (RNs) %	ACS 08-10 (RNs) %	ACS 08-10 (Wrk. Age Pop) %
White	80.4	75.4	66.9
Black/African American	8.8	9.9	11.8
Hispanic/Latino	3.3	4.8	14.2
Asian	5.7	8.2	4.8
Am Ind/AK Native	0.4	0.4	0.6
Haw. Nat./ Pac. Isl.	0.1	0.1	0.1
Multiple/Other	1.3	1.3	1.5

Data Sources: HRSA analysis of the ACS 2008-2010 three-year file and Census 2000 Long Form 5% sample

Nursing Workforce Trends: Setting of Employment

	RNs		LPNs	
	Census 2000 %	ACS 08-10 %	Census 2000 %	ACS 08-10 %
Hospitals	62.7	63.2	34.9	29.3
Nursing Care Facilities	8.3	7.4	30.2	30.7
Offices of Physicians	6.9	4.8	11.2	8.2
Home Health Care Services	4.5	3.8	5.6	6.3
Outpatient Care Centers	3.1	4.6	3.6	5.7
Other Health Care Services	2.9	5.4	2.3	7.0
Elementary and Secondary Schools	2.3	2.2	0.8	1.7
Employment Services	2.0	2.1	3.4	3.8
Insurance Carriers and Related Activities	1.0	0.9	0.3	0.2
Administration of Human Resource Programs	0.9	1.4	0.3	0.9
Justice, Public Order, and Safety Activities	0.7	0.6	1.0	1.3
Offices of Other Health Practitioners	0.6	0.3	0.9	0.4
Colleges and Universities, Including Junior Colleges	0.6	0.6	0.2	0.3
Residential Care Facilities, Without Nursing	0.5	0.4	1.8	1.3
All Other Settings	3.1	2.5	3.6	3.4

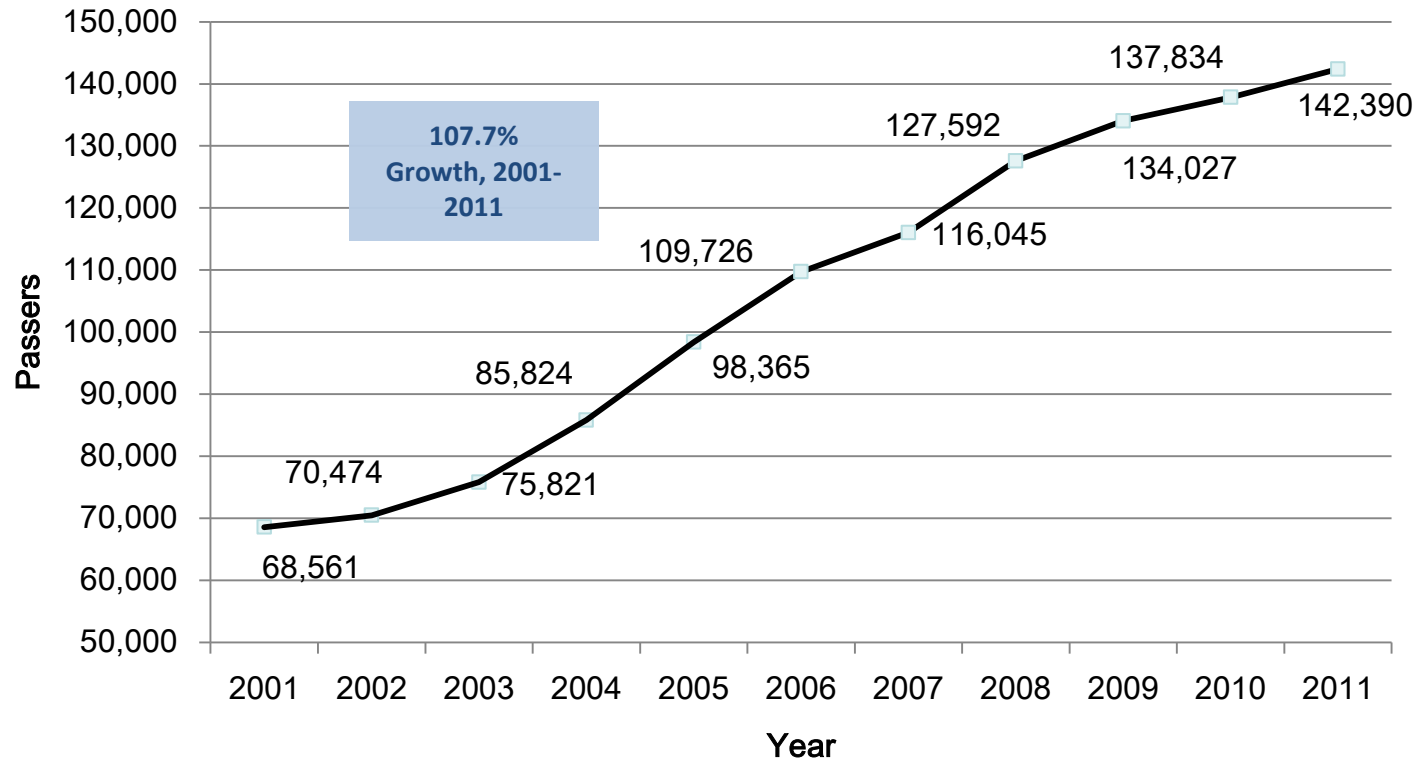
Data Sources: HRSA analysis of the ACS 2008-2010 three-year file and Census 2000 Long Form 5% sample

Education and Pipeline Data

Sources

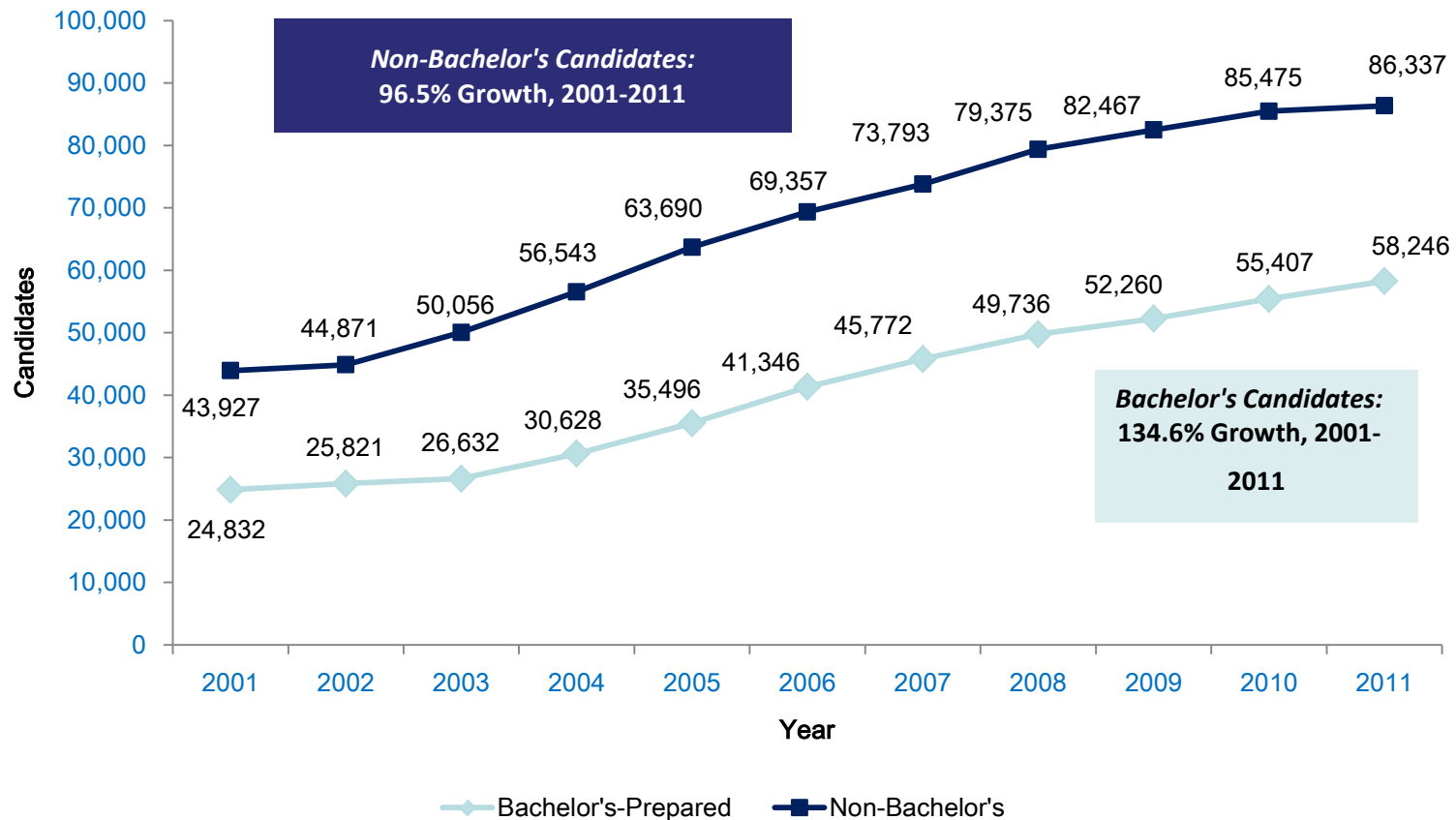
- National Council of State Boards of Nursing NCLEX examination data
- American Association of Colleges of Nursing annual survey data
- Advanced practice credentialing bodies for nurse midwives and anesthesiologists

Pipeline Trends: Growth in Annual NCLEX-RN Passers



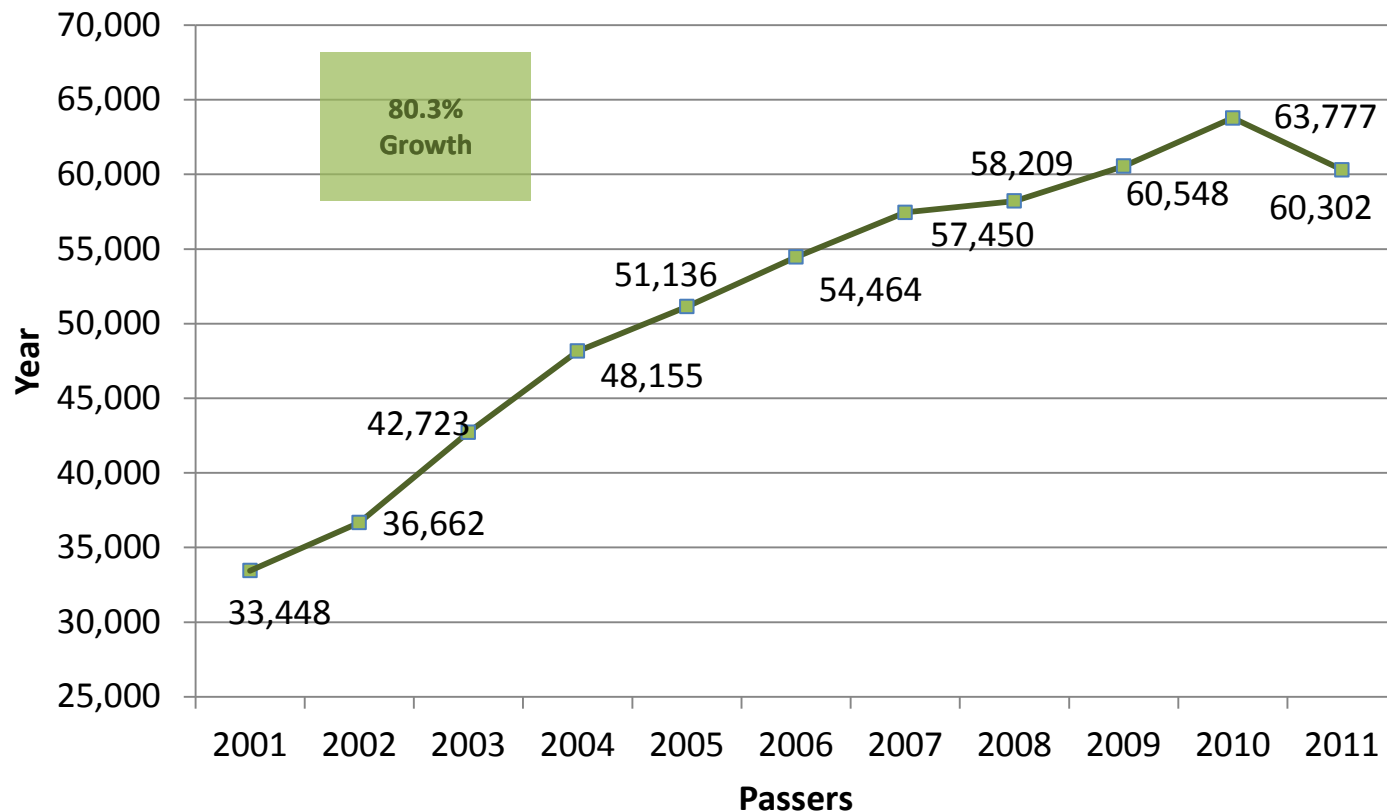
Data Source: HRSA compilation of data from the National Council of State Boards of Nursing, Nurse Licensure and NCLEX Examination Statistics Publications, 2002-2012, and from the National Council of State Boards of Nursing, "Number of Candidates Taking the NCLEX Examination and Percent Passing, by Type of Candidate," https://www.ncsbn.org/Table_of_Pass_Rates_2011.pdf

Pipeline Trends: Growth in Annual NCLEX-RN Candidates, by Degree Type



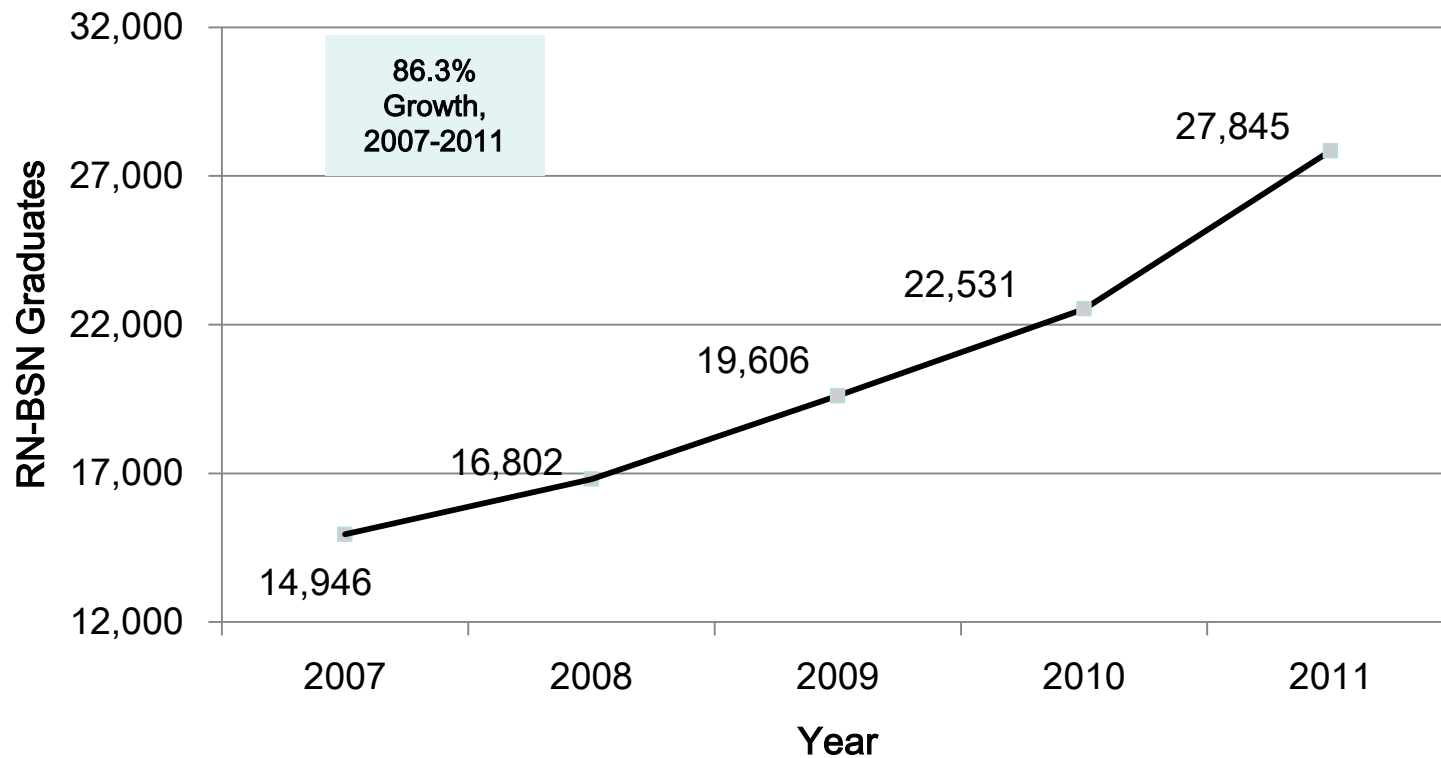
Data Source: HRSA compilation of data from the National Council of State Boards of Nursing

Pipeline Trends: Growth in Annual NCLEX-PN Passers



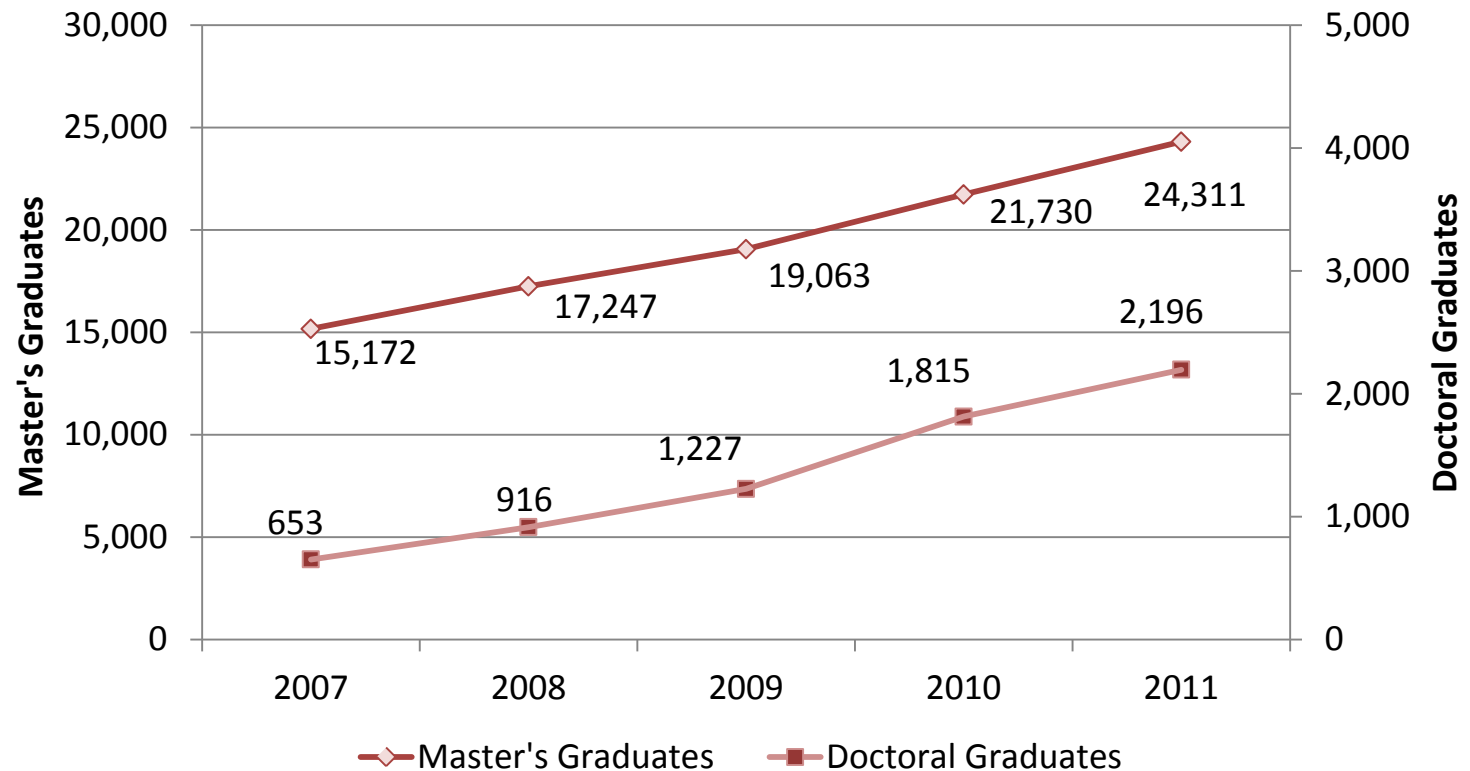
Data Source: HRSA compilation of data from the National Council of State Boards of Nursing

Post-Licensure Education: RN-BSN Graduates



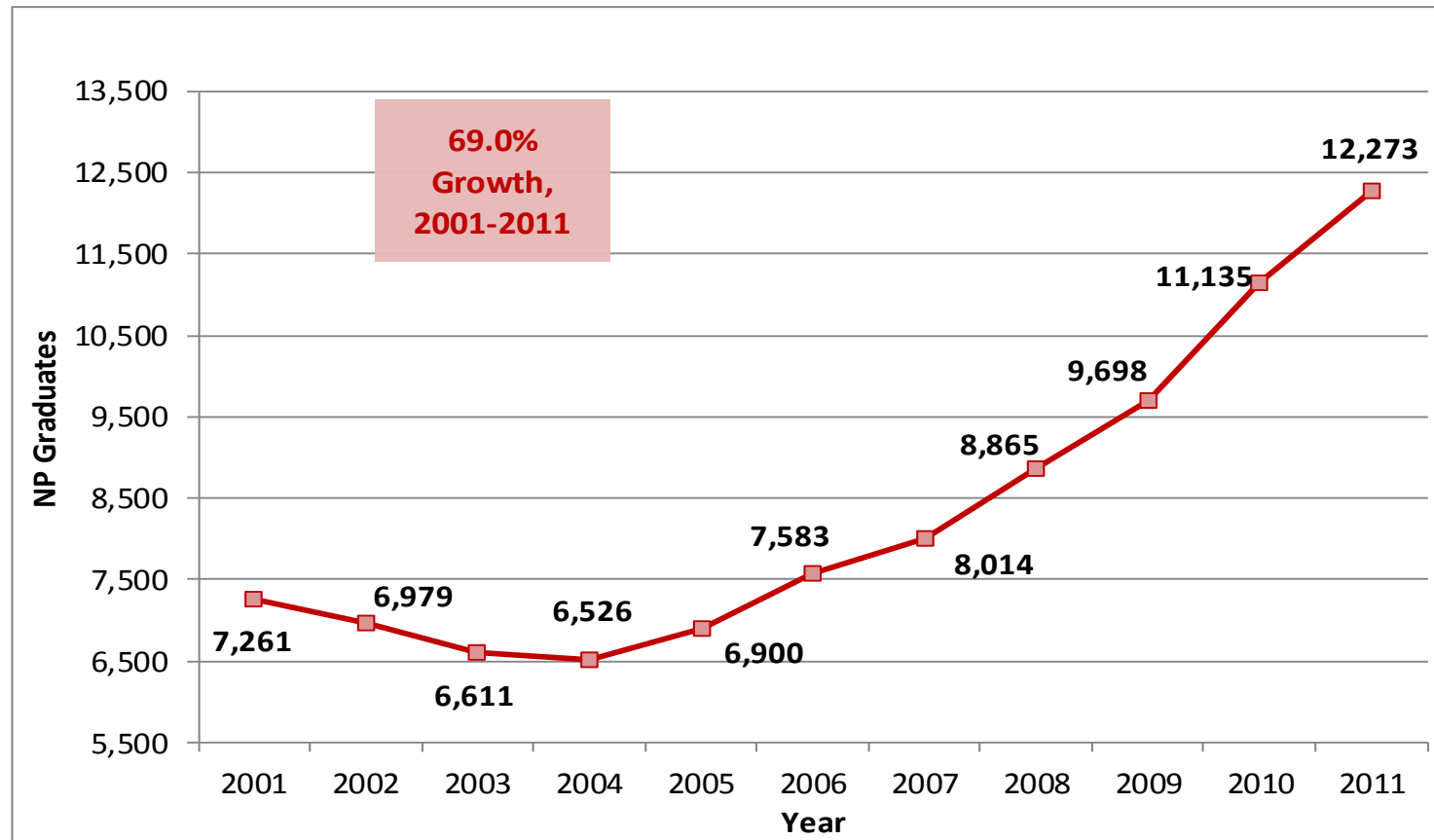
Data Source: HRSA compilation of data from the AACN Research and Data Center, 2012

Post-Licensure Education: Graduate Degrees Awarded



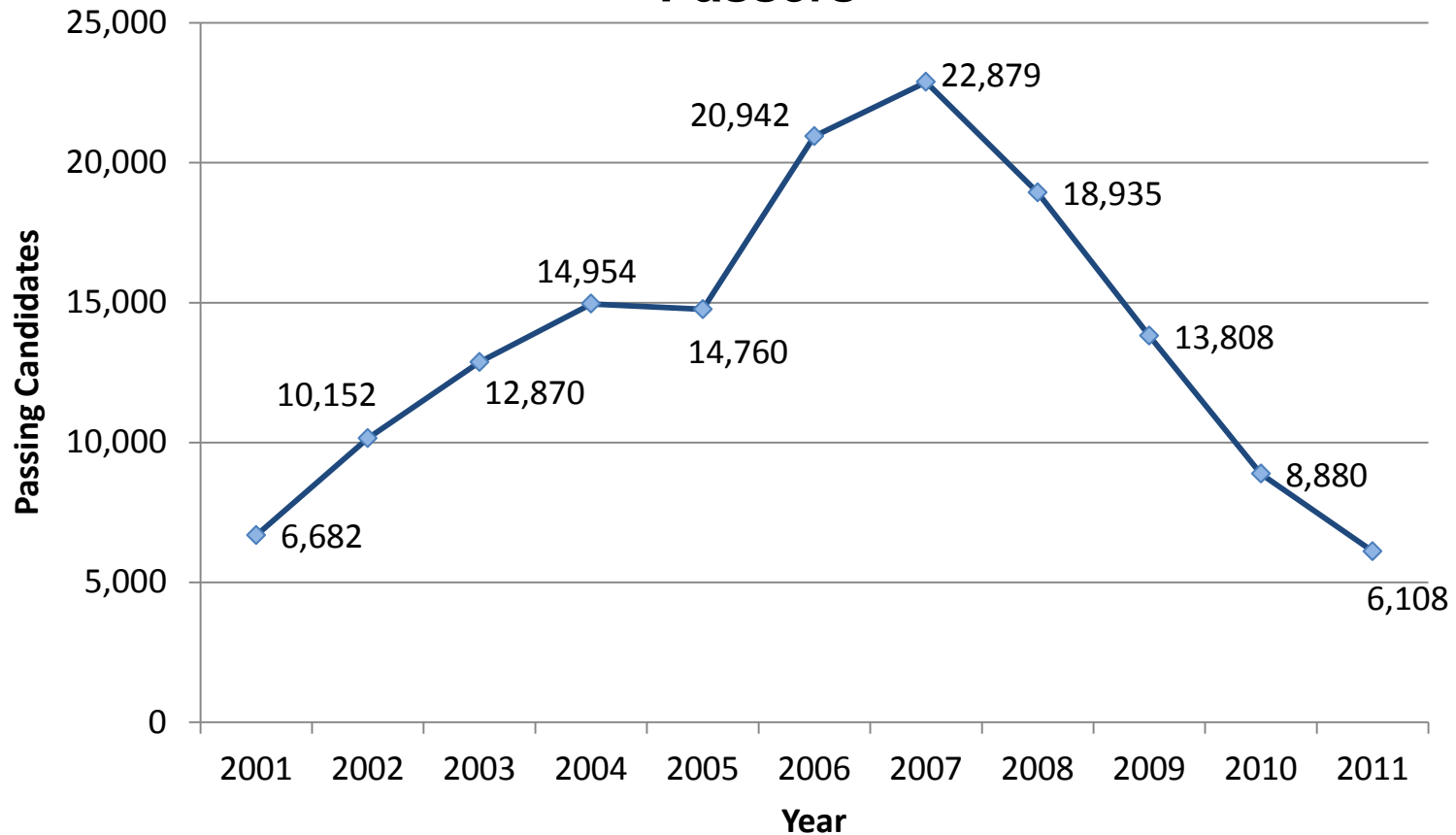
Data Source: HRSA compilation of data from the AACN Research and Data Center, 2012

Post-Licensure Education: NP Graduates



Data Source: HRSA compilation of data from the AACN Research and Data Center, 2012

Post-Licensure Education: International NCLEX-RN Passers



Data Source: HRSA compilation of data from the National Council of State Boards of Nursing

Summary

- Strong growth in the nursing workforce over past decade, but current distribution uneven across the country
- Aging remains a concern, as one-third of workforce nears typical retirement ages
- Rapid growth in new entrants over the past decade, and strong growth in post-licensure education
- More work remains to project RN and LPN supply and demand into the future

Nursing Workforce Projects Underway

- Analysis of existing data on the nursing workforce
- The 2012 National Sample Survey of NPs
- Projections of RN supply/demand through 2025
- Clinical projections including NPs, PAs and physicians
- Analysis of diversity within the health professions